**Chapter 12 Vocabulary:**

**Direct Modeling Invented Strategies**

**Computation Estimation**

**Place Value Traditional Algorithms**

**Empty Number Line**

**Mental Computation Bridging**

**Partitioning Cluster Problems**

**Distributive Property**

**Direct Modeling-** Developmental step that usually proceeds invented strategies.

**Invented Strategies-** Flexible methods of computing that vary with the numbers and situation.

**Computation Estimation-** Involves substituting “nice” numbers in a computation so that new computation can be mentally or at least minimal effort.

**Place Value-** Basis for computation; students can also develop this understanding as a result of finding their own methods of computing.

**Mental Computation-** Simply any invented strategy that is done mentally.

**Empty Number Line-** It is a number line that can be used with any number so that it doesn’t confuse students with hash marks and the spaces between them.

**Bridging/Crossing a Ten-** Technique used to make subtracting numbers easier by first subtracting in groups of ten, followed by the number in the ones place.

**Partitioning-** A strategy label provided earlier by the teacher.

**Cluster Problems-** Encourages students to use facts and combinations they know in order to figure out more complex computations.

**Distributive Property-** Splitting numbers and multiplying the parts.

**Traditional Algorithms-** Clever strategies for computing that have been developed over time.